



# Epi News



! Summer 2005

## **Pertussis Persists...**

The statewide pertussis (whooping cough) outbreak continues, and Coconino County is clearly a part of this outbreak. There have been 34 cases reported to the Coconino County Health Department (CCHD) so far in 2005, including 12 reported in August (as of Aug. 18). This is very unusual, because Coconino County typically has only about five cases per year. Moreover, we do not usually see cases of pertussis in the summer months. Healthcare providers are strongly encouraged to perform pertussis cultures on all patients suspected of having pertussis. This test is the only method available to confirm the diagnosis. The State Health Laboratory will provide this test free of charge. Approximately 20-30% of people who have had a cough for more than two weeks have pertussis. Healthcare providers are required to report suspected and confirmed cases to CCHD ((928) 522-7920).

Vaccination is very important to the control of this outbreak and future cases of pertussis. The Arizona Department of Health Services recommends an accelerated DTaP (diphtheria, tetanus, and acellular pertussis) vaccination schedule for infants at 6 weeks, 10 weeks and 14 weeks (instead of 2, 4, and 6 months). The last two DTaP doses are given at 12-18 months, and 4-6 years. CCHD is offering a new vaccine, Tdap (tetanus, diphtheria, and acellular pertussis), to children 11-18 years old who received their last DTaP dose at least five years ago. The vaccine is free for children through the Vaccines for Children (VFC) Program. Vaccination is especially important for anyone who lives with infants less than one year old. Children of this age are at increased risk of complications and death from pertussis. Vaccine is available for free for parents, grandparents, or caregivers who bring an infant to the clinic for vaccination. Vaccine is also available for other adults for a fee. The Coconino County Health Department offers vaccination clinics in Flagstaff on Mondays, Wednesdays, and Fridays, from 8:00 am to 4:00 pm. For more information, or to make an appointment, call CCHD at 522-7920.

## **Norovirus Outbreak at NAU**

On July 20, Coconino County Health Department received a call from the Emergency Department at Flagstaff Medical Center about three patients who were experiencing vomiting, diarrhea, and dehydration. The three patients were two participants and a staff member of a wrestling camp being held on the Northern Arizona University campus. Upon further investigation, CCHD learned that more than 40 other wrestling camp participants were also ill with similar symptoms. On Thursday, CCHD interviewed dozens of wrestling campers who were ill. On Friday morning, CCHD and NAU established a Unified Command System to investigate and manage the outbreak.

A total of 116 cases were identified as part of this outbreak. Over half of the cases occurred among participants and staff of the wrestling camp. A few of the ill wrestlers tested positive for norovirus at the State Laboratory, confirming this virus as the causative agent of the outbreak. In addition, the specific genetic type of norovirus that caused this outbreak has never been seen in Arizona before, indicating that the virus was most likely brought in by a camp participant that was infected elsewhere. The group with the highest percentage of ill participants was the wrestling camp. The illness spread extremely quickly through this group (with three wrestlers ill on one day, and 38 more ill on the next day). The close physical contact that takes place during wrestling probably led to much of the spread to other wrestlers. The virus also spread to a limited degree to three other summer camp groups that had shared space with the wrestlers. Other cases included NAU employees and students. Other sources of spread probably included being in close proximity to someone who was vomiting (during which the virus can become airborne), and touching contaminated surfaces in the dormitory, wrestling facility, or other locations on campus. Sink faucet handles, toilet handles, and toilet seats in the dormitory that housed the wrestling camp tested positive for the virus. (continued)



CCHD recommendations for outbreak control included: confining all participants of the affected summer camps to their residence halls, thorough and frequent handwashing by camp participants and NAU employees, and thorough cleaning and disinfection of the affected residence halls and other buildings. NAU officials decided to cancel all remaining summer conference camps on campus. NAU staff have thoroughly disinfected all residence halls and facilities that were likely to have been contaminated with norovirus. No cases of norovirus illness connected to this outbreak have been reported since July 28.

Norovirus is a very common cause of nausea, vomiting, and diarrhea illness. Other symptoms include low-grade fever, stomach cramps, body aches, muscle aches, and severe weakness. In rare cases, norovirus illness can lead to severe dehydration. The incubation period of the illness is usually 24-48 hours, but can be as short as 12 hours. The illness lasts from 24-60 hours. This virus can be spread very easily through person-to-person contact, contaminated surfaces, and contaminated food. Infected individuals can have the virus in their stool for up to two weeks after they have recovered, leading to spread of the virus from people who appear healthy. The best way to prevent norovirus is to wash your hands thoroughly with soap and warm water after using the restroom, before eating or preparing food, and several times throughout the day. People who are experiencing vomiting and/or diarrhea should not prepare or handle food.

## Communicable Disease Summary Report\*

Diagnosis or Reportable Condition	2005							2005	2004
	Jan	Feb	Mar	Apr	May	Jun	Jul	Jan-Jul	Jan-Jul
<b>campylobacteriosis</b>	3	2	2	6	0	3	0	16	23
<b>chlamydia</b>	18	28	23	24	22	16	22	153	185
<b>coccidioidomycosis</b>	3	0	0	1	0	1	2	7	2
<b><i>E. coli</i> O157:H7 infection</b>	0	0	0	1	0	0	0	1	0
<b>gonorrhea</b>	0	3	7	1	1	2	1	15	8
<b><i>Haemophilus influenzae</i>: Invasive Disease</b>	1	0	0	0	0	0	0	1	2
<b>hepatitis A</b>	0	0	0	1	0	0	0	1	1
<b>hepatitis B</b>	4	1	0	2	0	1	1	9	9
<b>hepatitis C</b>	7	10	11	6	7	4	4	49	101
<b>meningococcal invasive disease</b>	0	1	0	0	0	0	0	1	0
<b>methicillin-resistant <i>Staphylococcus aureus</i>**</b>	6	3	3	0	5	1	2	20	27
<b>pertussis</b>	4	0	0	0	0	10	8	22	1
<b>pneumococcal invasive disease</b>	2	0	1	2	0	0	0	5	10
<b>salmonellosis</b>	0	1	2	1	1	1	0	6	10
<b>streptococcal group A: invasive</b>	3	2	0	2	0	1	1	9	4
<b>chickenpox (varicella)</b>	3	6	5	4	2	2	2	24	33
<b>vancomycin-resistant <i>Enterococcus</i>**</b>	3	6	4	1	7	2	2	25	7

\*Data indicate the number of cases diagnosed during the given year and/or month in residents of Coconino County. Data do not include cases still under investigation. Data are provisional and subject to change.

\*\*Bacterial illnesses that do not respond to certain antibiotics.